

## Type I or II Categorical Exclusion Action Classification Form

STIP Project No.	<b>B-5947</b>
WBS Element	<b>45983.1.1</b>
Federal Project No.	<b>0581032</b>

### A. Project Description:

The purpose of this project is to replace Nash County Bridge No. 630091 on NC 581 over Tar River. Bridge No. 630091 is 311 feet long. The replacement structure will be a bridge approximately 310 feet long providing a minimum 34 feet clear deck width. The bridge will include two 12-foot lanes and 5-foot offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be raised to match the existing low chord elevation. The proposed bridge will be replaced to the west of the existing bridge. Traffic will be maintained on the existing bridge during construction of the proposed bridge.

The approach roadway will extend approximately 1,023 feet from the south end of the new bridge and 1,160 feet from the north end of the new bridge. The approaches will be widened to include a 24-foot pavement width providing two 12-foot lanes. Eight-foot shoulders will be provided on each side (11-foot shoulders where guardrail is included) with 2' paved shoulders. The roadway will be designed as a Major Collector Route with a 60 mile per hour design speed.

### B. Description of Need and Purpose:

NCDOT Bridge Management Unit records indicate Bridge No. 630091 has a sufficiency rating of 16.53 out of a possible 100 for a new structure. Per the latest Bridge Inspection Report the bridge is considered structurally deficient because the superstructure and substructure condition ratings are 4 out of 9.

The substructure of Bridge No. 630091 have timber elements that are seventy years old. Timber components have a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few elements are damaged or prematurely deteriorated. However, past a certain degree of deterioration, most timber elements become impractical to maintain and upon eligibility are programmed for replacement. Timber components of Bridge No. 630091 are experiencing an increasing degree of deterioration that can no longer be addressed by reasonable maintenance activities, therefore the bridge is approaching the end of its useful life.

### C. Categorical Exclusion Action Classification:

**Type I(A) - Ground Disturbing Action**

### D. Proposed Improvements:

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

*NOTE: The following Type I(C) Actions (NCDOT-FHWA 2019 CE Agreement, Appendix A) only require completion of Sections A through D to substantiate and document the CE classification: 1, 5, 8 (signs and pavement markings only), 11, 13, 14, 15, 16, 17, 19, and 20; or several other Type I Action subcategories identified in past NCDOT-FHWA CE Programmatic Agreements (see*

*Appendix D). Pre-approval as a CE does not exempt activities from compliance with other federal environmental laws.*

E. Special Project Information:

**Alternatives Discussion:**

**No Build** – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by NC 581.

**Rehabilitation** – The bridge was constructed in 1949 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the timber components which would constitute effectively replacing the bridge.

**Offsite Detour** – An offsite detour was not considered due to the length of the offsite detour and the volume of traffic served by NC 581. The available offsite detour is NC 97 to SR 1001 to SR 17 to SR 1921 and is 12.5 miles in length and there are 5,300 vpd traveling NC 581. In addition, Southern Nash Middle School is located just 0.5 miles south of the bridge, and school/bus traffic would be heavily impacted by an offsite detour.

**Preferred Alternative** – The preferred alternative replaces the bridge just west of the existing bridge. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be raised to match the existing low chord elevation. To minimize impacts to the Tar River, the proposed bridge will span the river. Traffic will be maintained on the existing bridge during construction of the proposed bridge and impacts to traffic from the adjacent Southern Nash Middle School will be minimized.

**Bridge Demolition:** Bridge No. 630091 has a concrete deck with steel I-beams and reinforced concrete caps on timber piles. Based on standard demolition practices, it should be possible to remove with no resulting debris in the water.

**Estimated Costs:**

The estimated costs are as follows:

R/W:	\$	57,500
Util.:	\$	35,000
Const:	\$	6,400,000
Total:	\$	6,492,500

**Estimated Traffic:**

2020 (Let)	5,300 vpd
2040 (Design)	6,300 vpd
TTST	1%
Dual	4%

**Accidents:** Traffic Engineering has evaluated a recent five year period and found two accidents occurring in the vicinity of the project. One of the accidents involved a head on collision and one of the accidents involved a vehicle striking a fixed object.

**Design Exceptions:** There are no anticipated design exceptions for this project.

**Pedestrian and Bicycle Accommodations:** According to the Nash County Comprehensive Transportation Plan NC 581 is recommended for on-road bicycle facilities and connects with State Bike

Route 2. The proposed bridge will include a 5' shoulder on both sides to accommodate future bicycle use. The bridge rail will be the standard 42" F-shape rail which is considered bicycle safe. No temporary bicycle or pedestrian accommodations will be provided.

**Anticipated Permit or Consultation Requirements:**

A Nationwide Permit will likely be required from the U.S. Army Corps of Engineers (USACE) for impacts to "Waters of the United States" resulting from this project. In addition, an NCDWR Section 401 Water Quality General Certification (GC) may be required prior to the issuance of a Section 404 Permit. The USACE holds the final discretion as to what permit will be required to authorize project construction.

**Public Outreach:**

A landowner notification letter was sent to all property owners affected directly by this project on November 15, 2018. Property owners were invited to comment. No comments have been received to date.

Tribal coordination letters were distributed on December 16, 2019 to the Eastern Band of Cherokee Indians (EBCI), the Catawba Indian Nation, the Cherokee Nation, and the United Keetoowah Band of Cherokee. Comments on the proposed project were requested by January 17, 2020. No comments have been received to date.

F. Project Impact Criteria Checklists:

<b>F2. Ground Disturbing Actions – Type I (Appendix A) &amp; Type II (Appendix B)</b>				
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &amp;/or 30; &amp;/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> <li>• <i>If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required.</i></li> <li>• <i>If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.</i></li> </ul>				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked “Yes”.)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):

**Question 1 – Endangered Species:**

The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Nash County, where B-5947 is located. This level of incidental take is authorized from the effective date of a final listing determination through April 30, 2020.

**Question 8 – Endangered Species:**

**Yellow lance mussel and Tar River spiny mussel** – Section 7 compliance for the Yellow lance mussel and the Tar River spiny mussel will be met through the Programmatic Biological Opinion (PBO) issued by the U. S. Fish and Wildlife Service (USFWS). The use of the PBO indicates the following biological conclusions: Yellow lance mussel: May Affect, Likely to Adversely Affect; Tar River spiny mussel: May Affect, Likely to Adversely Affect. The Department will adhere to all PBO project-specific requirements as well as monitoring and reporting requirements. Payments are made quarterly to the NC Nongame Aquatic Species Fund by NCDOT.

**Question 10 – Buffer Rules:**

This project is located in the Tar-Pamlico River Basin (USGS HUC 03020102). Potential jurisdictional features within the study area are therefore subject to streamside riparian zones protected under provisions administered by the North Carolina Department of Environmental Quality (NCDEQ).

**Question 16 – Floodplain:**

This project is located in a FEMA Detailed Study dated 7/7/2014. The project will be processed as a MOA Type 2a, which is a decrease in the 100 year Base Flood elevation, through the North Carolina Floodplain Mapping.

H. Project Commitments:

## **NCDOT PROJECT COMMITMENTS**

STIP Project No. **B-5947**  
**Bridge No. 630091 on NC 581**  
**Over Tar River**  
Nash County  
Federal Aid Project No. 0581032  
WBS Element 45983.1.1

### **NCDOT Hydraulic Unit – FEMA Coordination**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

### **NCDOT Division Four Construction, Resident Engineer's Office -FEMA**

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

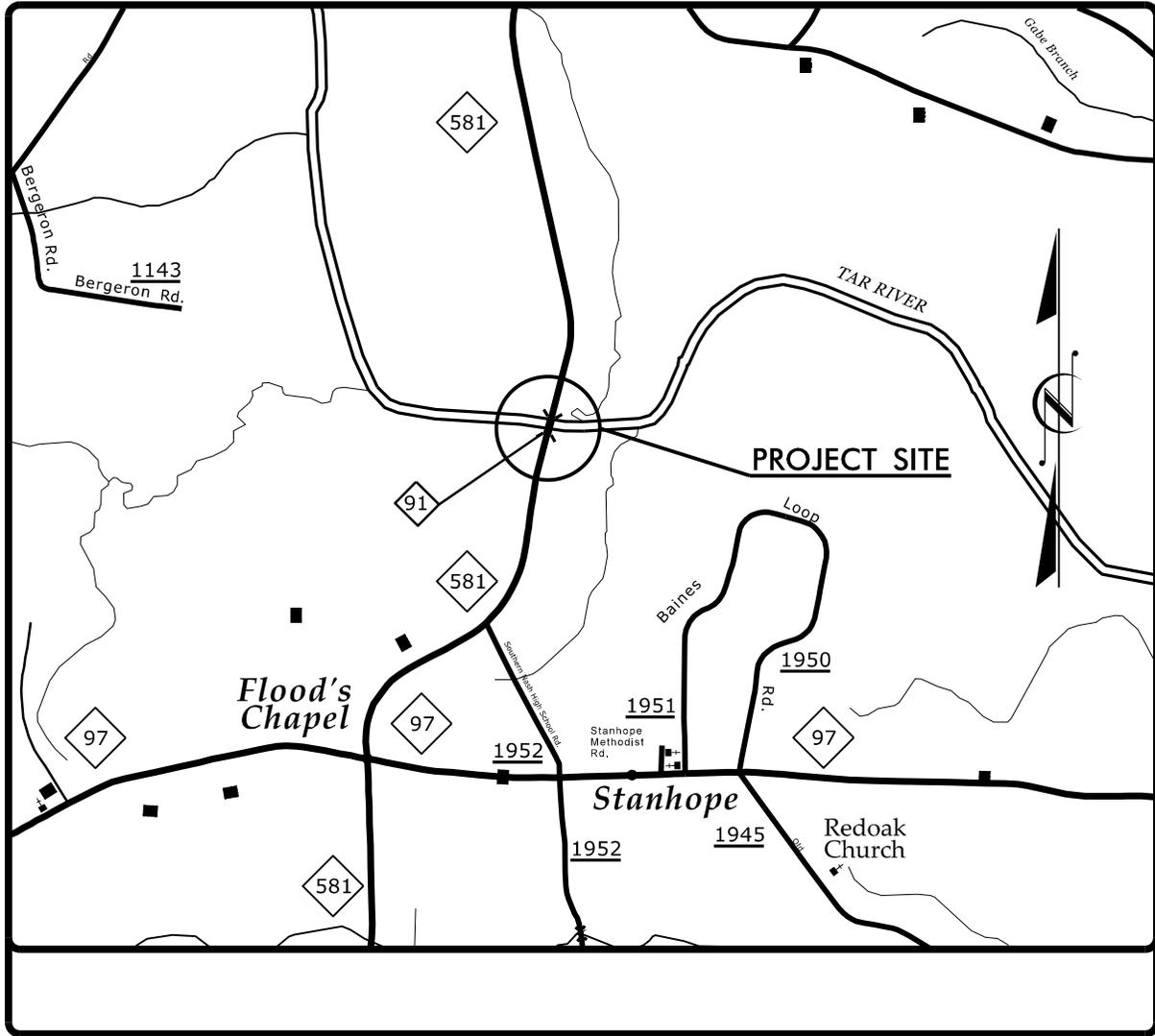
### **NCDOT Hydraulic Unit – Buffer Rules**

The Tar-Pamlico River Basin Rule applies to this project.

### **NCDOT Environmental Analysis Unit – Section 7**

Section 7 will need to be resolved for the Yellow lance mussel and the Tar River spiny mussel prior to permitting and construction.





<p><b>B-5947</b></p> <p>REPLACE BRIDGE NO. 630091 ON NC 581 OVER TAR RIVER</p> <p>NASH COUNTY</p> <p>WBS 45983.1.1</p>
<p>NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION 4</p>
<p>VICINITY MAP - FIGURE 1</p>

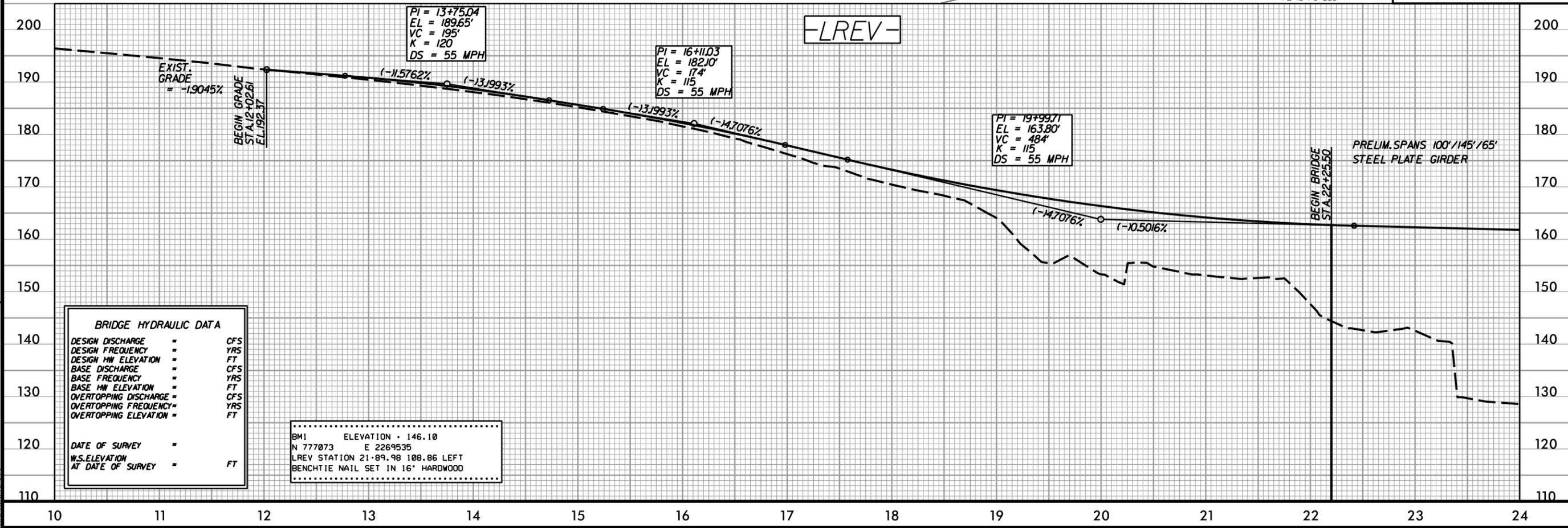
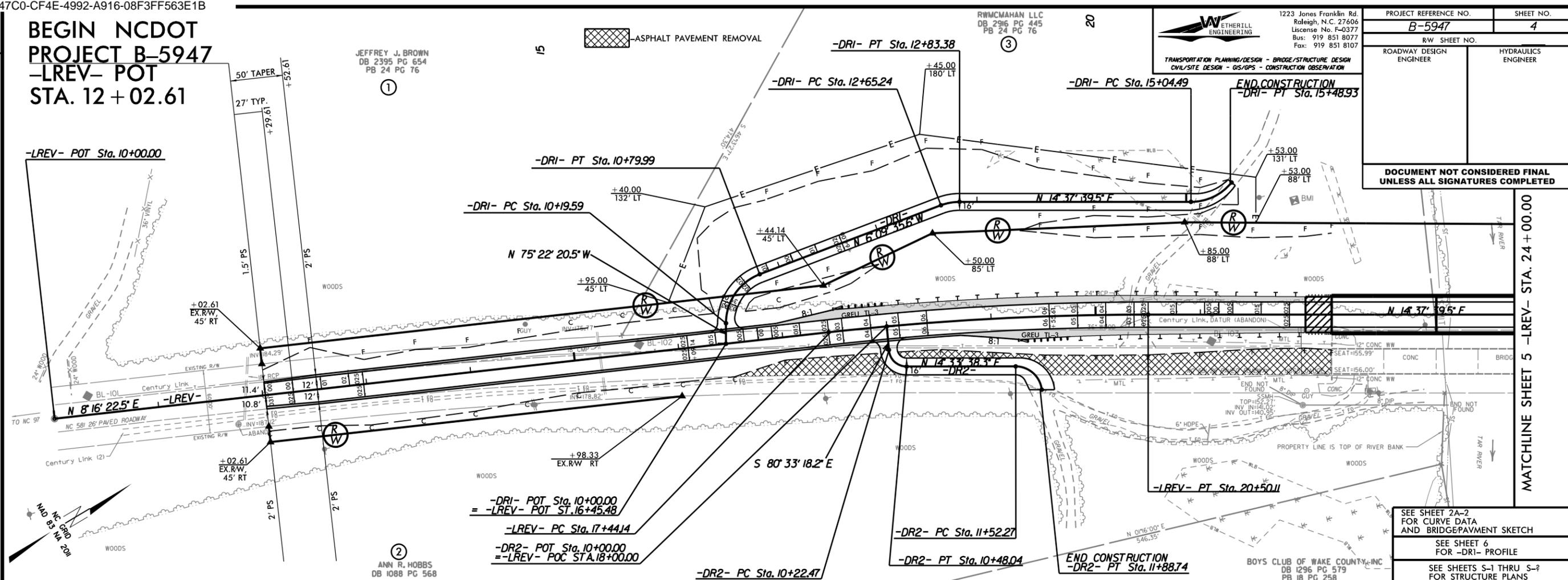
**BEGIN NCDOT  
PROJECT B-5947  
-LREV- POT  
STA. 12 + 02.61**

**ETHERILL ENGINEERING**  
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

1223 Jones Franklin Rd.  
Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919 851 8077  
Fax: 919 851 8107

PROJECT REFERENCE NO. <b>B-5947</b>	SHEET NO. <b>4</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



REVISIONS

8/8/2019  
B-5947\_rdy\_psh\_4.dgn

MATCHLINE SHEET 5 -LREV- STA. 24 + 00.00

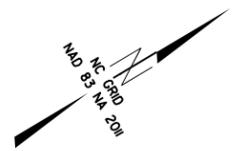
SEE SHEET 2A-2 FOR CURVE DATA AND BRIDGEPAVEMENT SKETCH  
SEE SHEET 6 FOR -DRI- PROFILE  
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

8/17/09

25

30

35



MARK D. SMITH  
NO DEED REFERENCE

Survey file.

ASPHALT PAVEMENT REMOVAL



1223 Jones Franklin Rd.  
Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919 851 8077  
Fax: 919 851 8107

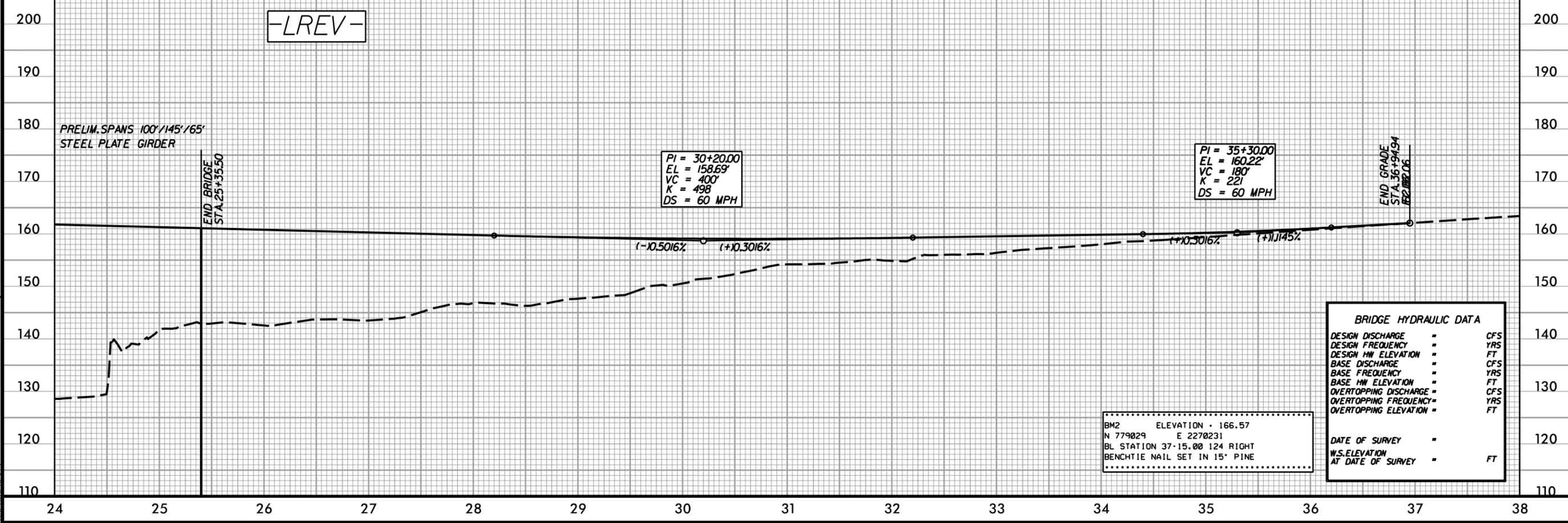
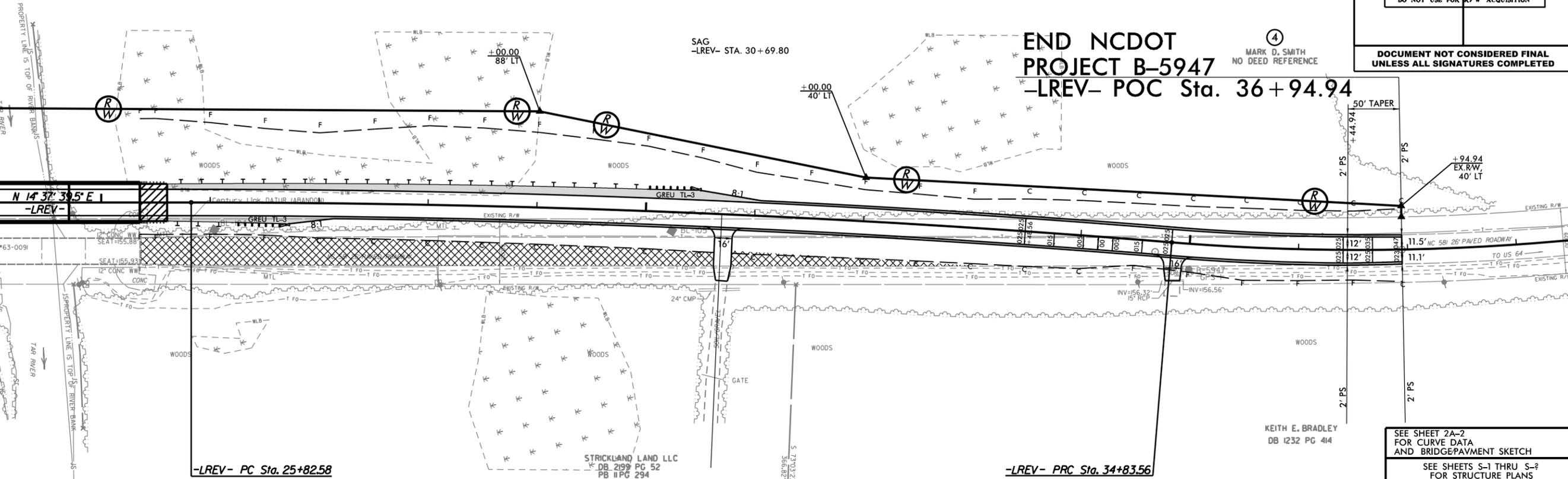
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. <b>B-5947</b>	SHEET NO. <b>5</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	

**END NCDOT PROJECT B-5947**  
**-LREV- POC Sta. 36 + 94.94**

MARK D. SMITH  
NO DEED REFERENCE

MATCHLINE SHEET 4 -LREV- STA. 24 + 00.00



PRELIM. SPANS 100' / 145' / 65'  
STEEL PLATE GIRDER

END BRIDGE  
STA. 25 + 35.50

PI = 30+20.00  
EL = 158.69'  
VC = 400'  
K = 498  
DS = 60 MPH

PI = 35+30.00  
EL = 160.22'  
VC = 180'  
K = 221  
DS = 60 MPH

END GRADE  
STA. 36 + 94.94  
162.06

BRIDGE HYDRAULIC DATA		
DESIGN DISCHARGE	-	CFS
DESIGN FREQUENCY	-	YRS
DESIGN HW ELEVATION	-	FT
BASE DISCHARGE	-	CFS
BASE FREQUENCY	-	YRS
BASE HW ELEVATION	-	FT
OVERTOPPING DISCHARGE	-	CFS
OVERTOPPING FREQUENCY	-	YRS
OVERTOPPING ELEVATION	-	FT
DATE OF SURVEY	-	
W.S. ELEVATION AT DATE OF SURVEY	-	FT

BM2 ELEVATION - 166.57  
N 779029 E 2270231  
BL STATION 37+15.00 124 RIGHT  
BENCHTIE NAIL SET IN 15' PINE

REVISIONS

8/8/2009  
B-5947.rdy.psh 5.dgn



12-05-0043 resubmit
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assemblage. At the time of their survey, the site was characterized by agricultural row crops and pronounced erosion, particularly to the southern end of the site. While the Baily topographic map maintained at the OSA demonstrated that this prehistoric site was situated several hundred feet east of NC 581 and well beyond any potential construction impacts associated with the Bridge 91 replacement, the sketch map attached to the site form illustrated the site to form a crescent-like shape extending in a westerly direction toward the subject road. Although both maps definitively illustrate that the boundaries of 31NS12 terminate quite a distance east of the currently defined APE, the proximity of this long occupied prehistoric location suggests that additional occupations on the landforms within and directly adjacent to the APE may also contain subsurface archaeological deposits.

Examination of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing resources available on the North Carolina State Historic Preservation Office (NCSHPO) website demonstrated that no resources with potential archaeological deposits were located in the vicinity of the APE. Also, historic maps of Nash County were appraised for former structure locations, land use patterns, cemeteries, or other confirmation of historic occupation in the project vicinity. Archaeological/historical reference materials were reviewed as well.

In addition, topographic, geologic, flood boundary, lidar, and NRCS soil survey maps were referenced for the evaluation of geomorphological, pedological, hydrological, and other environmental-type elements that may have resulted in past occupation at this location. Finally, review of aerial and on-ground images (NCDOT Spatial Data Viewer, Google, ARC-GIS) afforded first-hand perspectives of the overall study area which were useful for assessing localized disturbances, both natural and human induced, which compromise the integrity of archaeological sites/deposits. Based on environmental determinants, the APE is considered to have a very low potential for the recovery of archaeological artifacts, deposits, or features. However, the site locational consistency of 31NS12 must be assessed. An archaeological survey will therefore be recommended for the project.

An in-field reconnaissance and visual survey was conducted by NCDOT archaeologists Scott Halvorsen and Paul Mohler on April 24, 2019. First, a visual inspection of the entire APE was completed. No above-ground historic features or cemeteries were encountered. Furthermore, the project quadrant that may contain traces of 31NS12 was logged with secondary vegetative growth about 10ft. high. Two transects were established, one on each side of NC 581, approximately 100ft from the roads center-line. Shovel tests were numbered sequentially south to north with the project area, were excavated at 30 meter intervals, and measured roughly 40cm x 40cm in width. Each shovel test pit location was inspected though several areas were not suitable for subsurface testing based on wetlands and slope.

Shovel test pits # 1 and 2 were situated at the southern boundary of the APE along transect #1 (west side). A typical STP contained a 7.5YR3/2 silt loam to 10cmbs atop a second stratum consisting of 7.5YR5/6 sandy clay loam to 30cmbs. Sterile subsoil was encountered at depths below 30cmbs and consisted of 5YR5/6 clay. No artifacts were collected from these two shovel tests. Shovel test #'s 3-7 were classified as no digs based on the extremely sloped land surfaces leading into a gully and creek to the west. Likewise, shovel test pits 8-10 were situated within a wetland and no shovel testing could be undertaken. In total, 10 locations were investigated for cultural resources within the southwestern project quadrant with only 2 of these constituting shovel test pit locations.

Investigation continued along the western transect into the northwestern project quadrant. Shovel test pit #'s 11 – 17 were all situated within a tagged wetland. This area contained ponded water on the surface of the APE. As a result, no subsurface testing was conducted here. STP's 18 -20 were excavated

12-05-0043  
resubmit

near the northern project boundaries along transect 2 in the northwestern quadrant. A typical STP contained a first soil stratum of 7.5YR 5/2 clay loam to 40 – 50cmts atop 7.5YR5/1 clay. No artifacts were contained in any of the 3 shovel tests completed in the northwestern quadrant.

Next, shovel testing began along transect 2 (eastern side) at the southern project boundaries. Initially, the first four shovel test pits were located on a ridge trending parallel to NC 581. Four shovel test pits were excavated at 30 meter intervals and numbered 21 – 24. A typical STP contained a first soil stratum of 7.5YR5/2 sandy silt loam to 15cmts atop a second stratum of 10YR5/4 clayey loam. The third stratum was a 7.5YR5/6 strong brown sterile subsoil. No artifacts were collected from these three shovel tests excavated within the southeastern quadrant. STP's 25 – 30 were inspected but not excavated do to sloping land surfaces and ponded wetland surfaces.

Finally, shovel testing continued into the northeastern project quadrant. The first 5 shovel test pit locations (STP 31 -35) were in a wetland and therefore not excavated. The next 5 locations were excavated due to the level land surface and proximity of 31NS12. A typical STP contained a first soil stratum of 10YR5/4 clayey laom to 30cmts atop a second stratum of 7.5YR5/6 clay subsoil. No artifacts were encountered during shovel testing within the northeastern quadrant. No portions of 31NS12 extend into the currently defined APE.

Following investigation of the B-5947 project area, no further archaeological consultation will be necessary. Our work found the APE to be largely situated within a wetland area and those sections of the APE shovel tested were found to be somewhat eroded. The entire APE was visually inspected and no indication of 31NS12 was made nor any cultural remains recovered. A finding of "No historic properties present" is deemed appropriate.

**SUPPORT DOCUMENTATION**

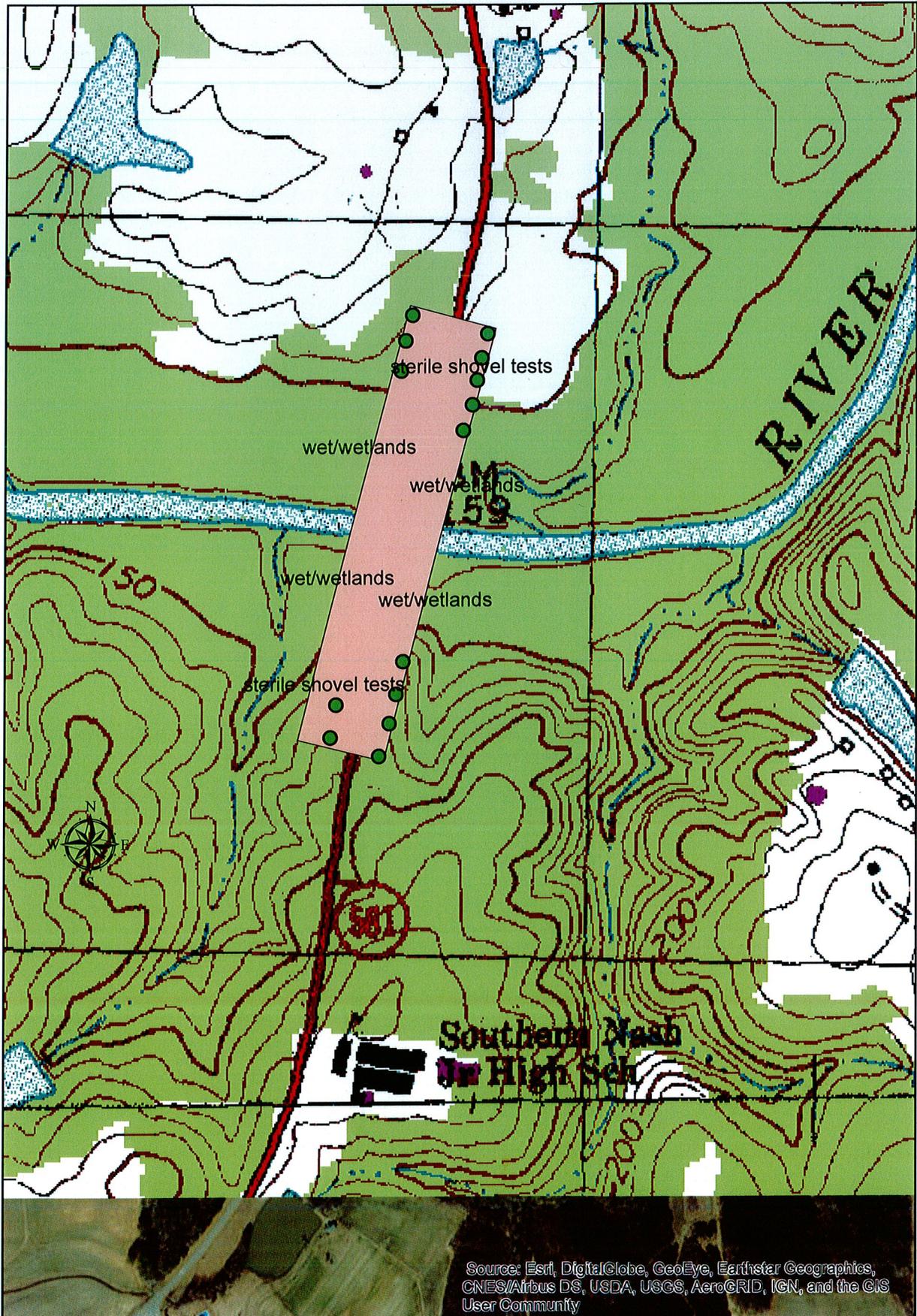
See attached:  Map(s)     Previous Survey Info     Photos     Correspondence  
Signed:

*Eric Holman*

*4-27-19*

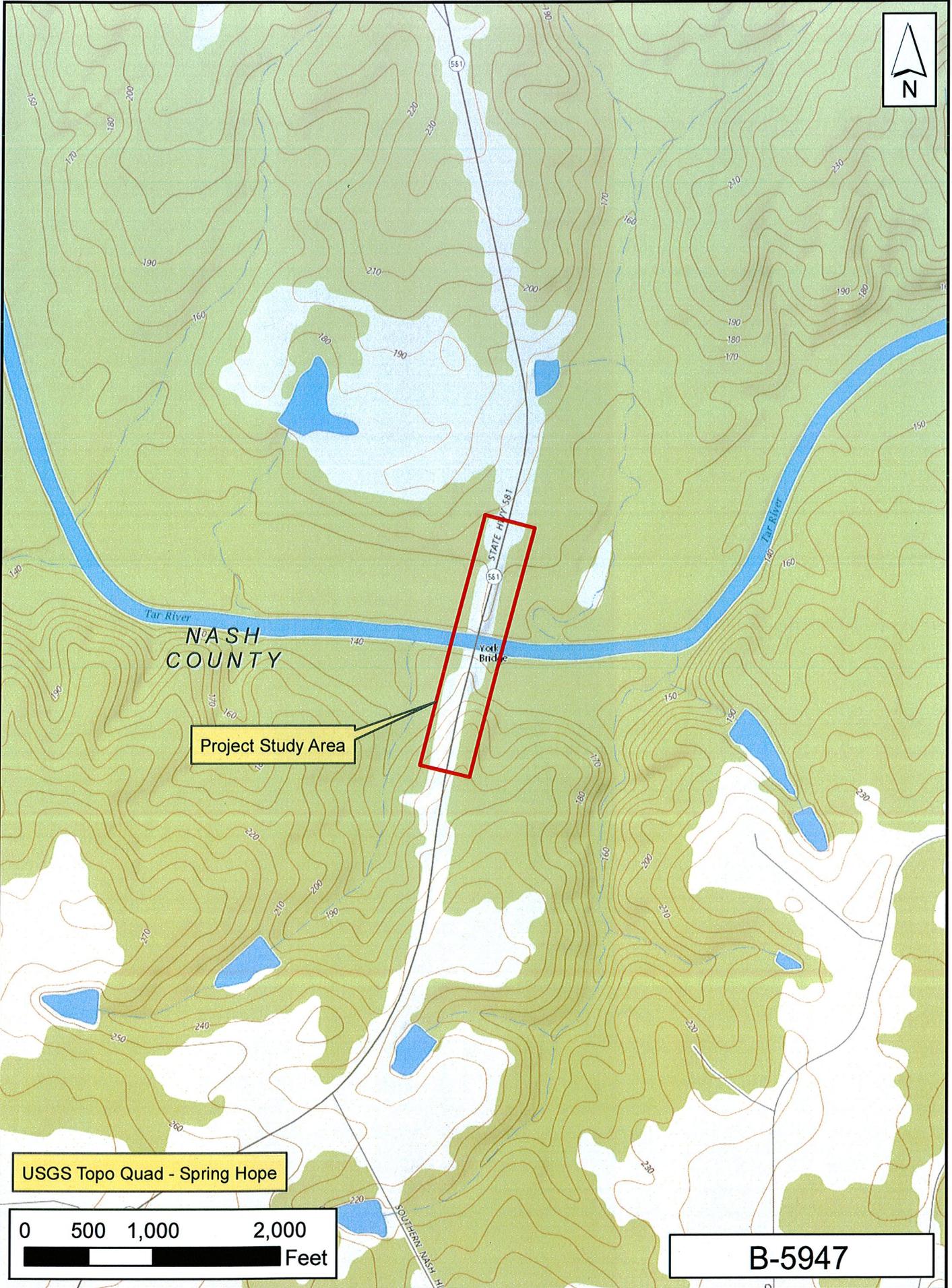
**NCDOT ARCHAEOLOGIST**

**Date**



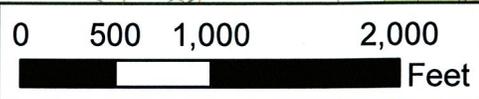
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ARC-GIS aerial shape file map illustrating the location and boundaries of the archaeological Area of Potential Effects (APE), sterile shovel test pit locations (green dots), & wetlands in Nash County, North Carolina.



Project Study Area

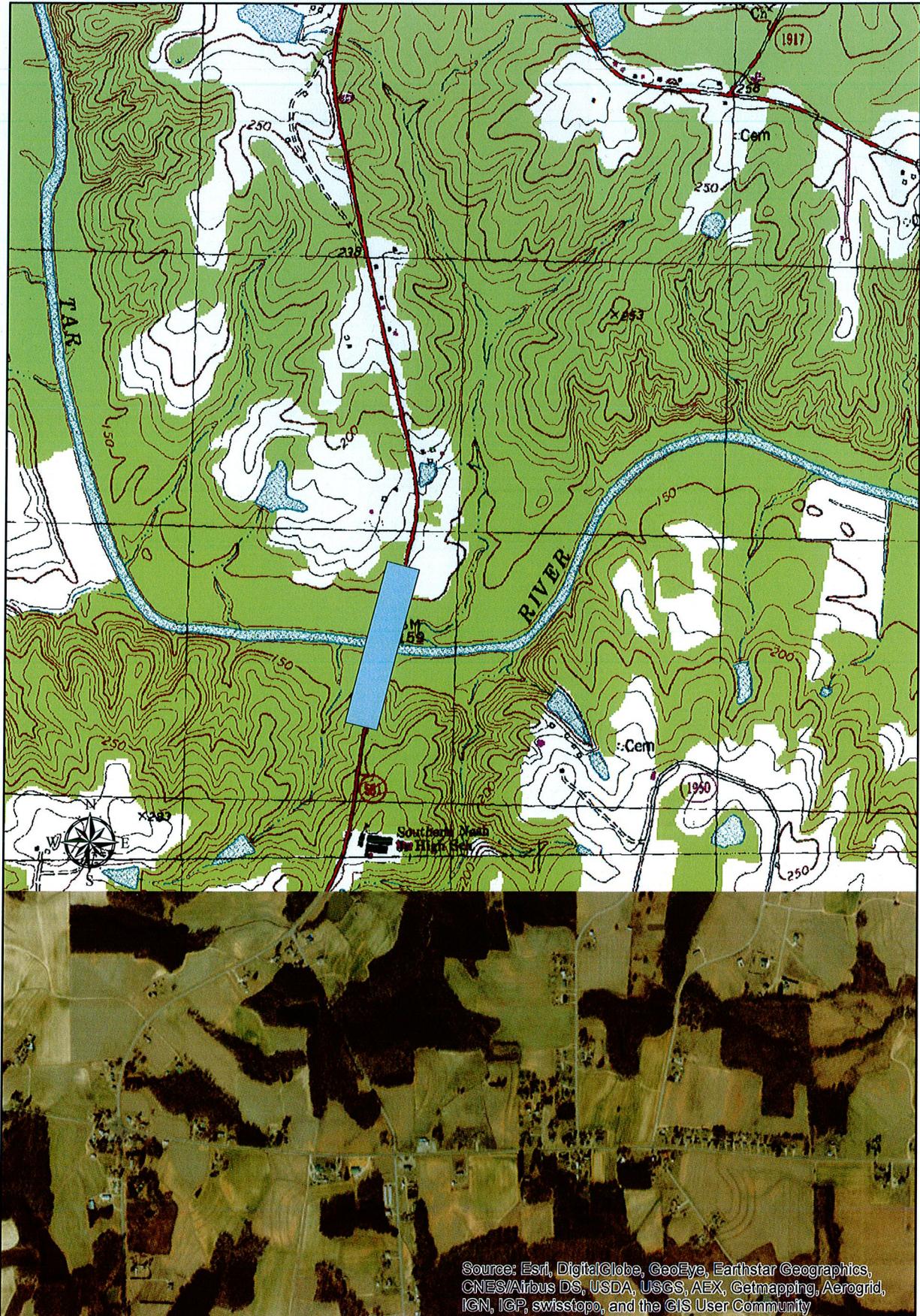
USGS Topo Quad - Spring Hope



B-5947



ARC-GIS aerial shape file map detailing the location and boundaries of the archaeological Area of Potential Effects (APE) in Nash County, North Carolina.



Portion of the Spring Hope topographic map detailing the location and boundaries of the archaeological Area of Potential Effects (APE) in Nash County, North Carolina.

12-05-0043



**HISTORIC ARCHITECTURE AND LANDSCAPES  
NO SURVEY REQUIRED FORM**

**This form supercedes that dated 31 May 2012**

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

**PROJECT INFORMATION**

<b>Project No:</b>	B-5947	<b>County:</b>	Nash
<b>WBS No.:</b>	45983.1.1	<b>Document Type:</b>	
<b>Fed. Aid No:</b>		<b>Funding:</b>	X State    Federal
<b>Federal Permit(s):</b>	X    Yes    No	<b>Permit Type(s):</b>	USACE
<b>Project Description:</b> Replace Bridge No. 91 on NC 581 over the Tar River (no off-site detour specified in review request).			

**SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW**

**DESCRIPTION OF REVIEW ACTIVITIES, RESULTS, AND CONCLUSIONS:** HPOWeb reviewed on 16 October 2018 and yielded no NR, SL, LD, DE, or SS properties in the Area of Potential Effects (APE). Nash County current GIS mapping and aerial photography indicated a largely wooded APE containing several residential and institutional resources constructed mostly in the second half of the twentieth century (viewed 16 October 2018). The APE intersects the extreme western edges of two large parcels on which stand, respectively, the much altered Southern Nash Middle School (ca. 1950 and 1970s) and the early-twentieth-century Boys Club hall, each approximately 2000 feet distant (south and east) from the existing bridge and well beyond likely project impact. Constructed in 1949, Bridge No. 91 is not eligible for the National Register as it is neither aesthetically nor technologically significant according to the NCDOT Historic Bridge Inventory. Google Maps "Street View" confirmed the absence of critical architectural or landscape resources in the APE (viewed 16 October 2018).

**No architectural survey is required for the project as currently defined.**

**WHY THE AVAILABLE INFORMATION PROVIDES A RELIABLE BASIS FOR REASONABLY PREDICTING THAT THERE ARE NO UNIDENTIFIED SIGNIFICANT HISTORIC ARCHITECTURAL OR LANDSCAPE RESOURCES IN THE PROJECT AREA:**

APE equates with the study area provided in the review request (see attached). The comprehensive county architectural survey (1984), as well as later studies record no properties in the APE (Richard L. Mattson. *The History and Architecture of Nash County, North Carolina* (Nashville, NC: Nash County Planning Department, 1987)). County GIS/tax materials and other visuals support the absence of significant architectural and landscape resources in the APE. No National Register-listed properties are located in the APE.

**Should the project limits or any other aspect of the design change, please notify NCDOT Historic Architecture as additional review may be necessary.**

**SUPPORT DOCUMENTATION**

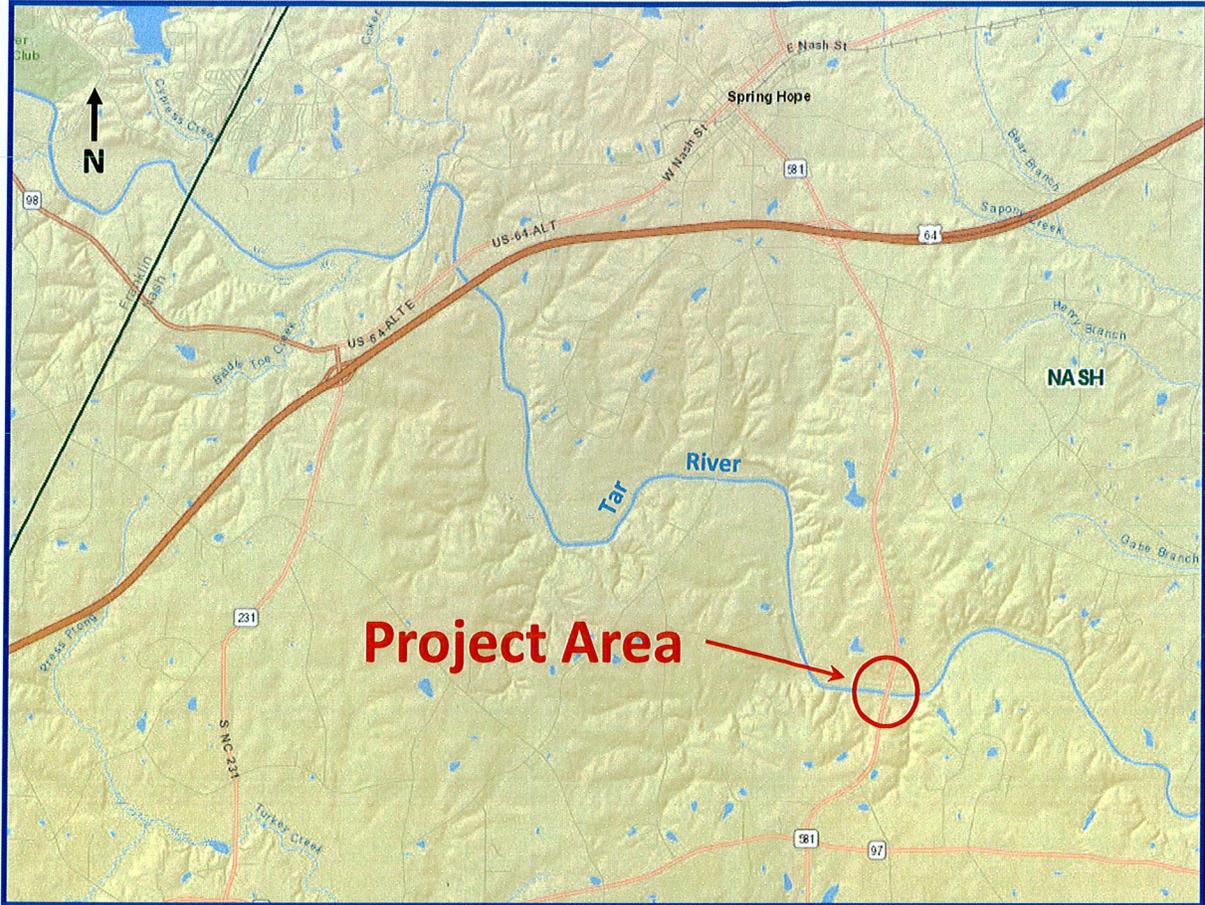
X Map(s)     Previous Survey Info.     Photos     Correspondence     Design Plans

**FINDING BY NCDOT ARCHITECTURAL HISTORIAN**

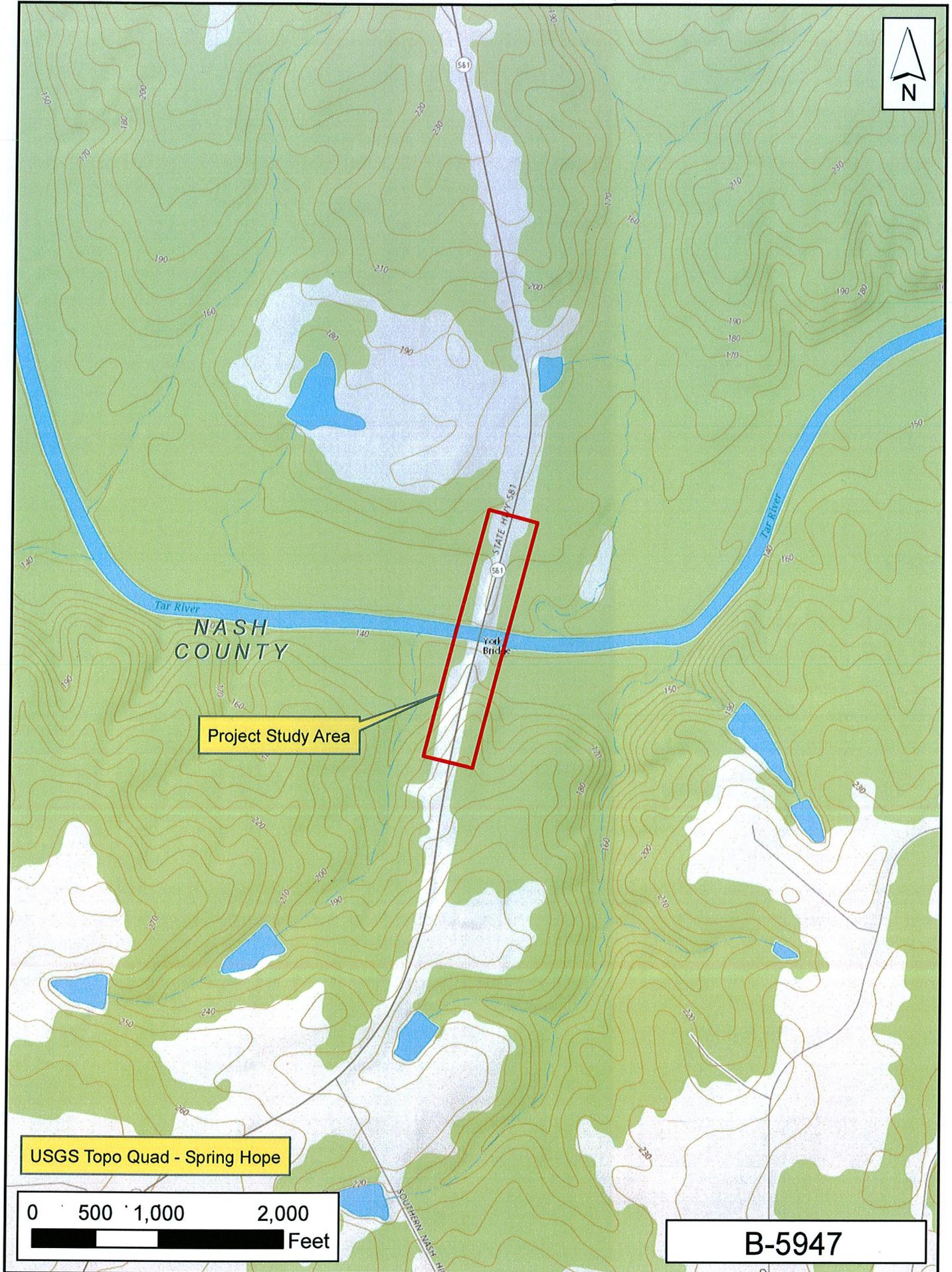
Historic Architecture and Landscapes - **NO SURVEY REQUIRED**

*Vanessa C. Fabrick*  
NCDOT Architectural Historian

*16 October 2018*  
Date



Bridge No. 91 Replacement      B-5947      Nash County  
WBS No. 45983.1.1      Base map: HPOWeb, nts



Tracking No. 12-05-0043